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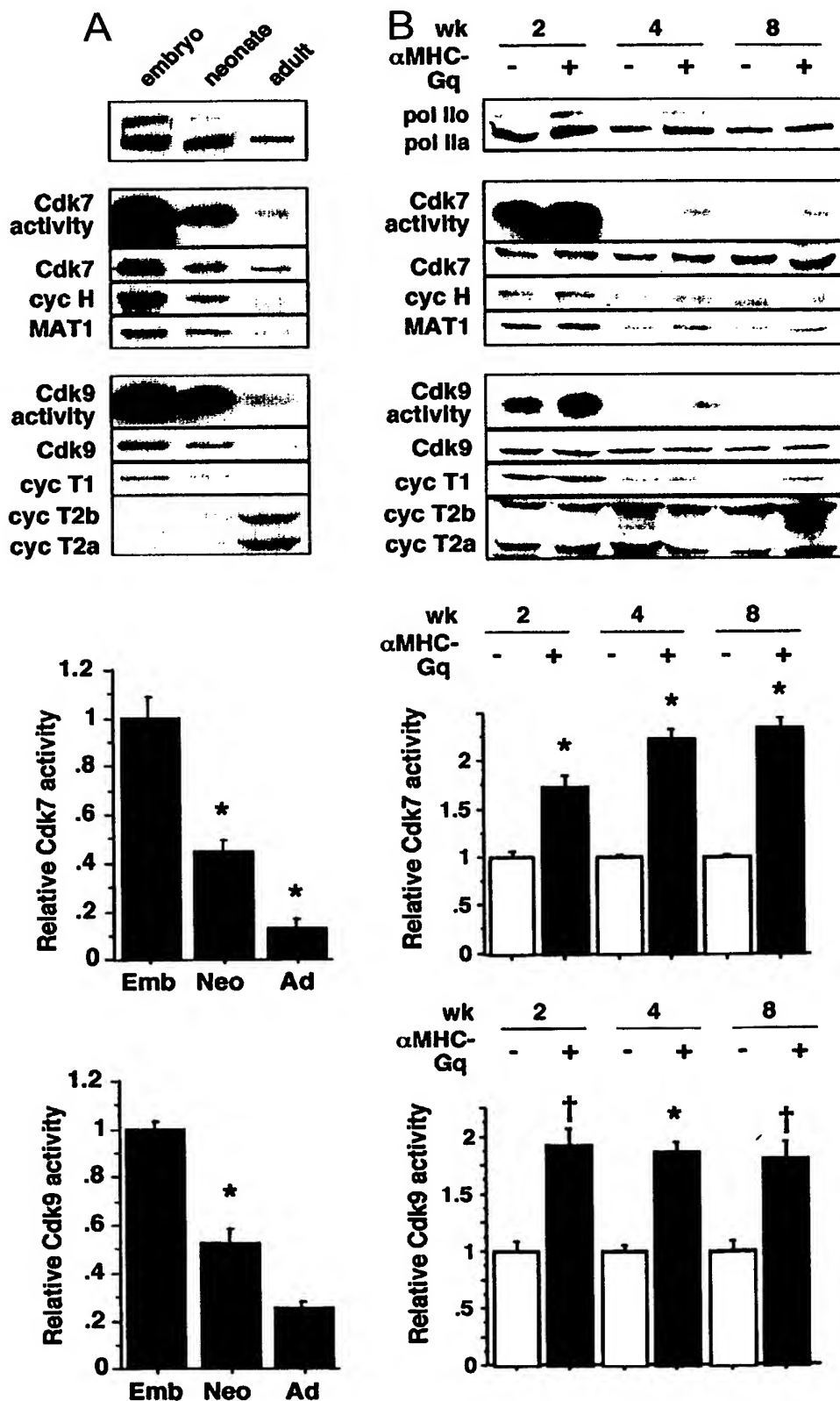


FIG. 1



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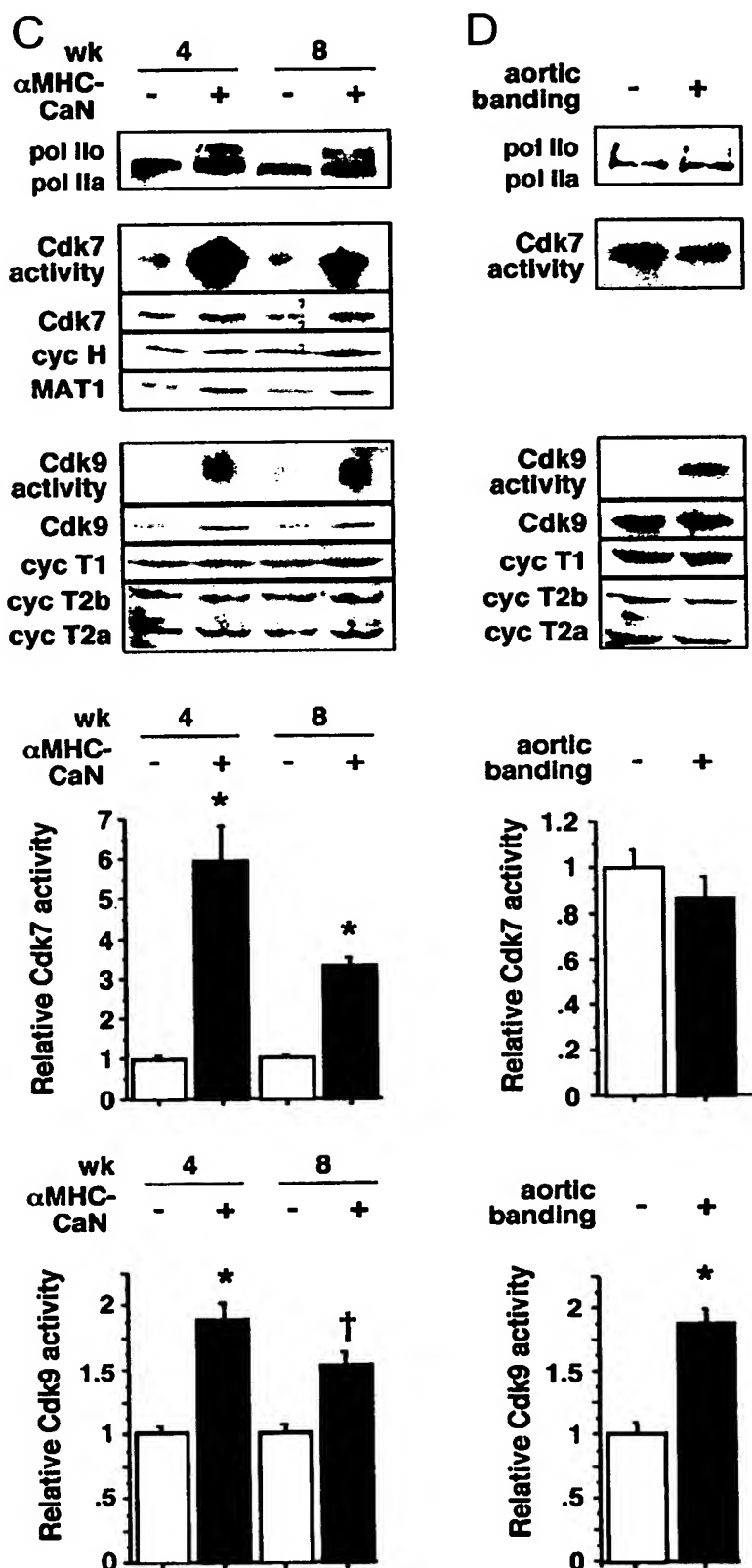
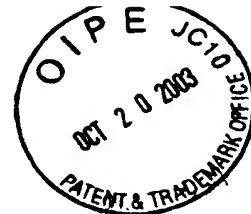


FIG. 1



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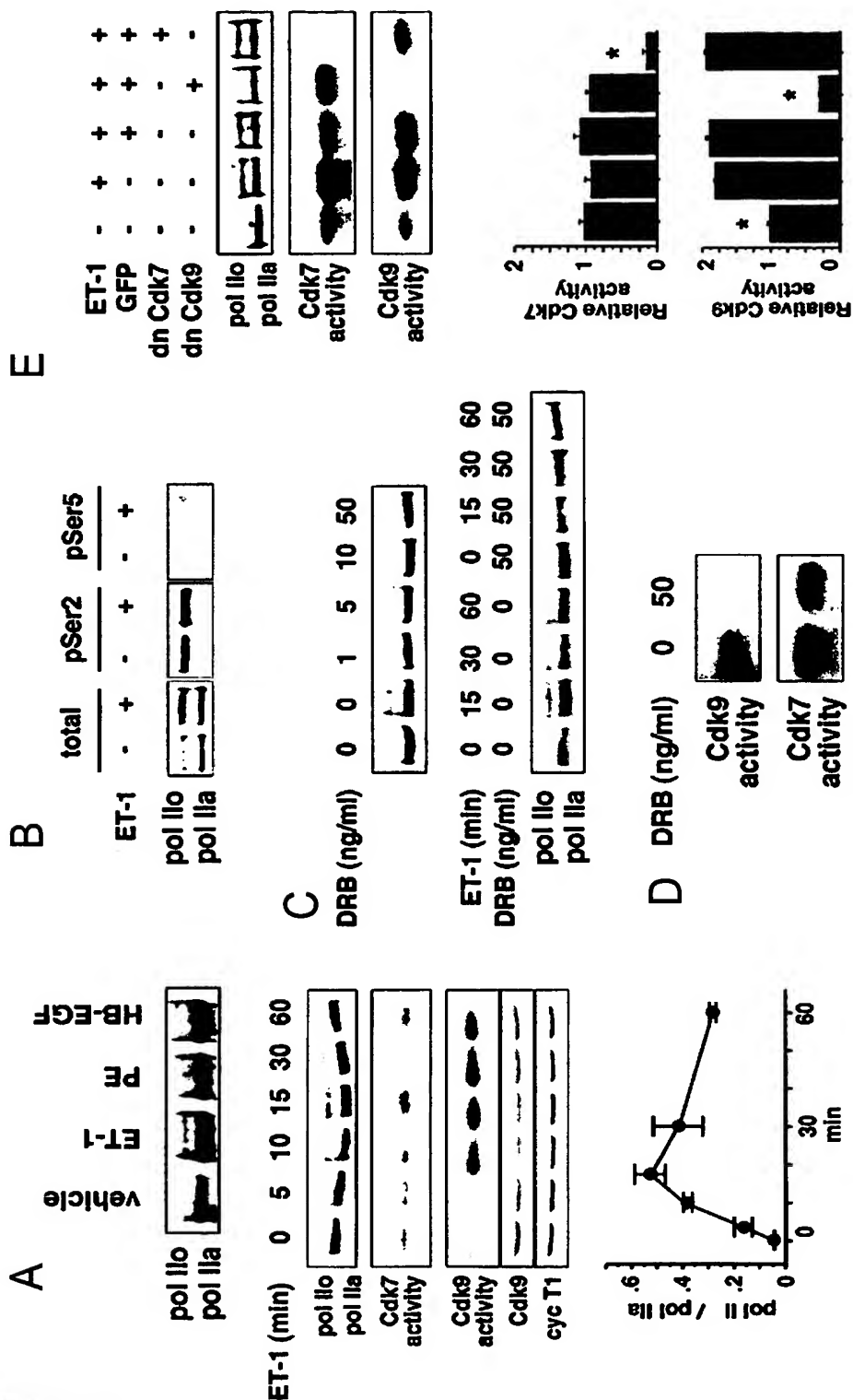
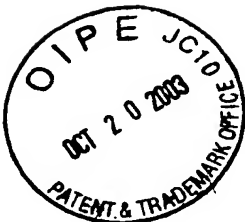


FIG. 2



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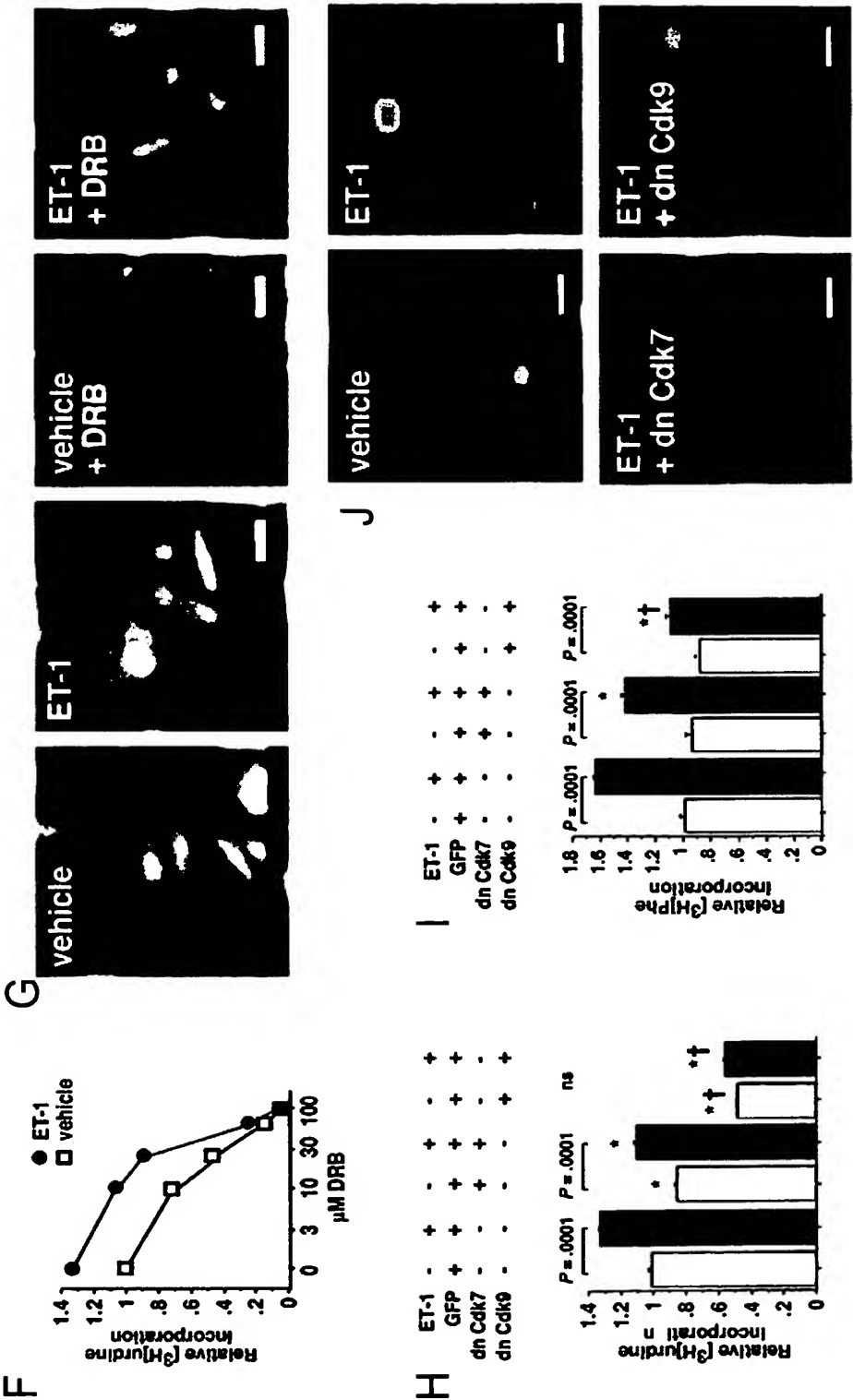


FIG. 2



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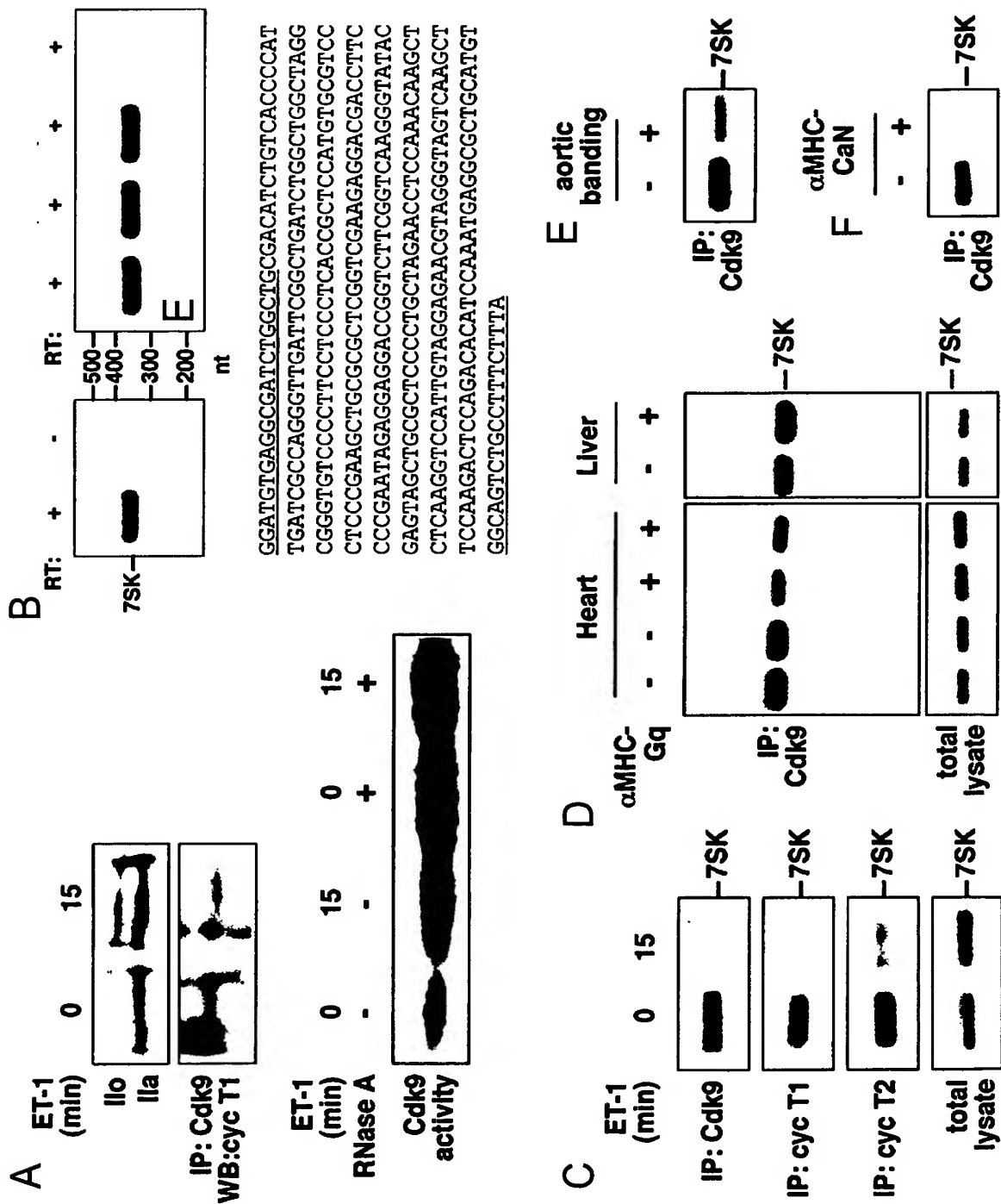
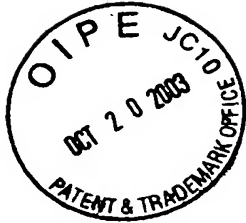


FIG. 3



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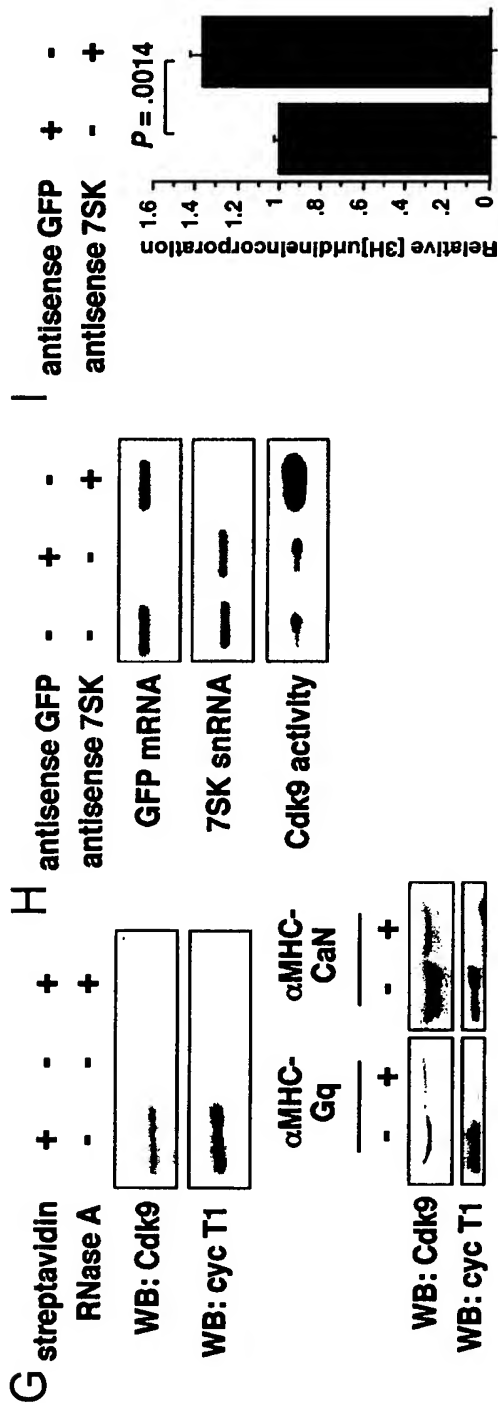


FIG. 3

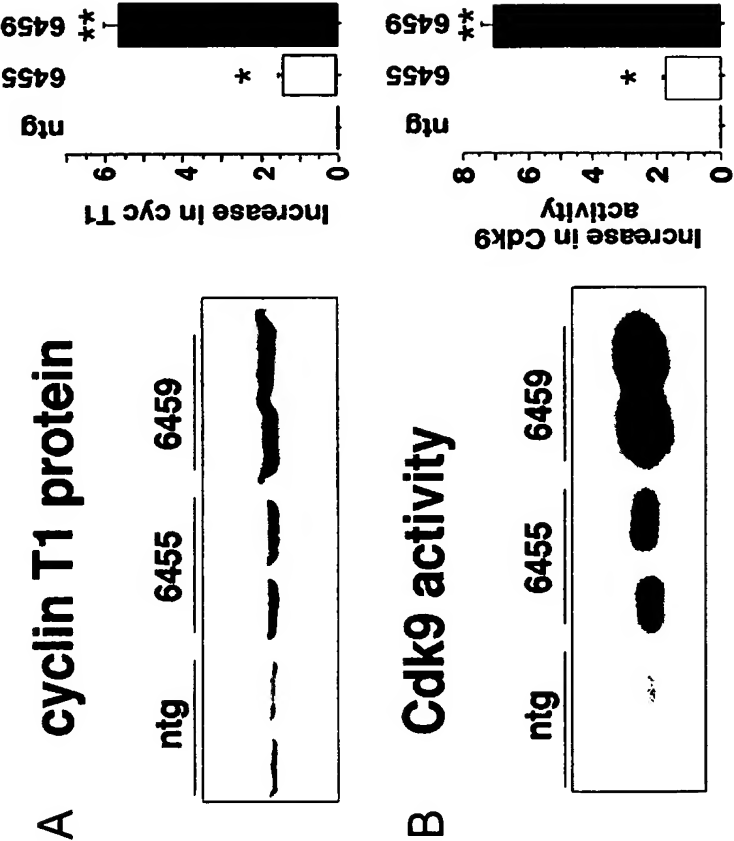
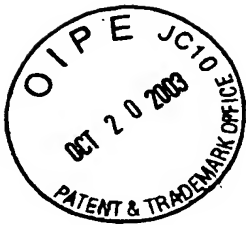


FIG. 4

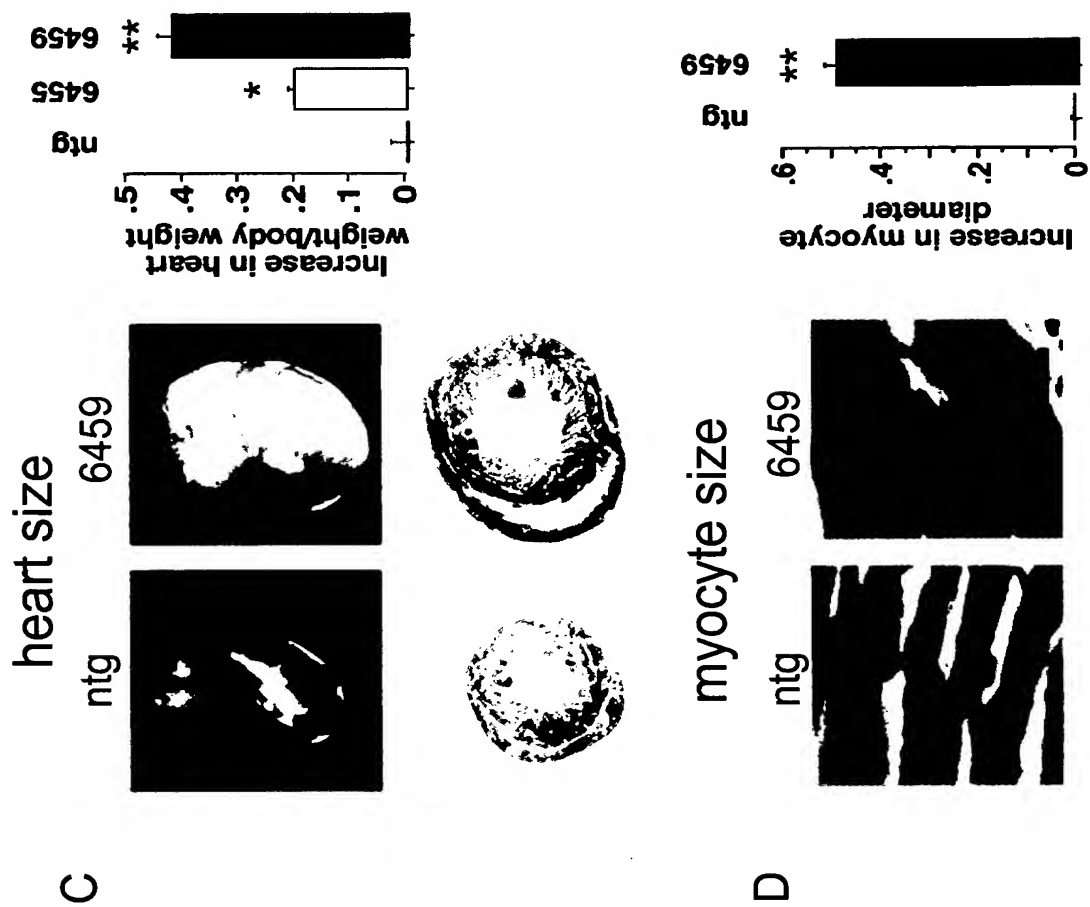
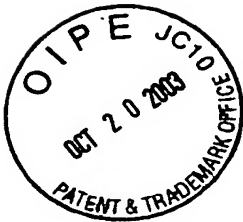
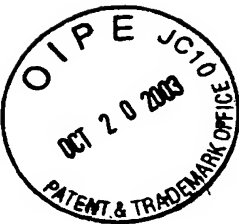


FIG. 4



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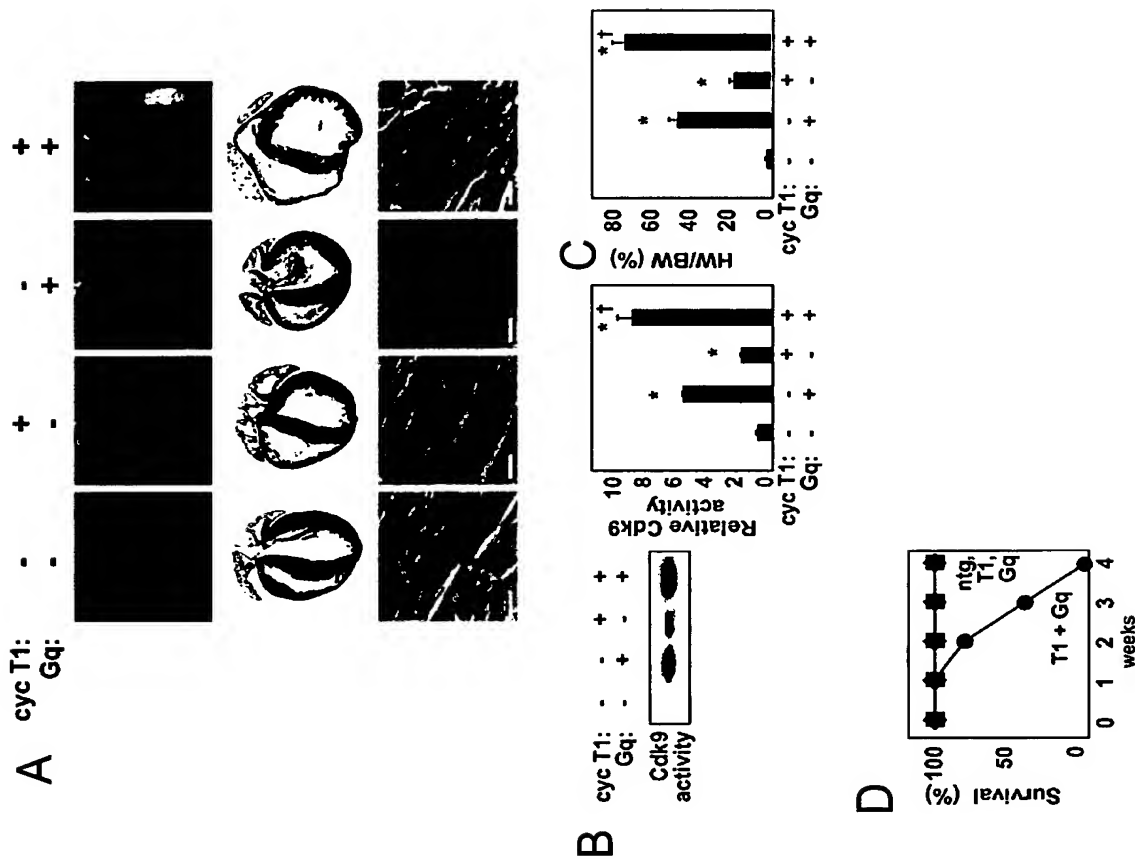
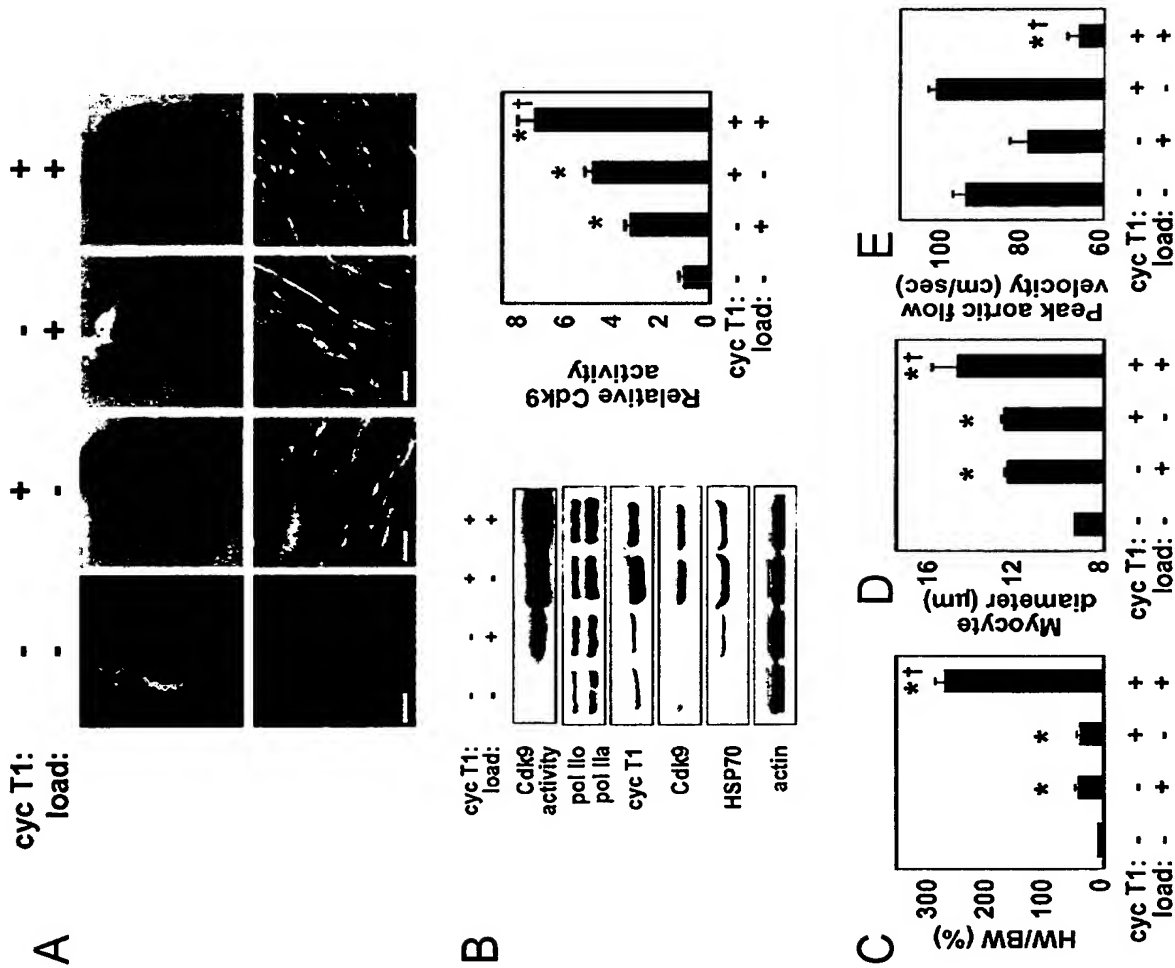
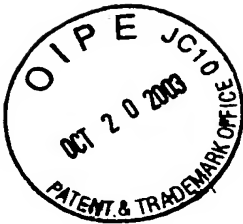
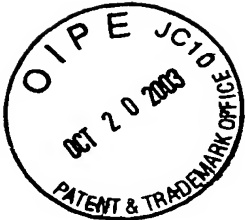


FIG. 5





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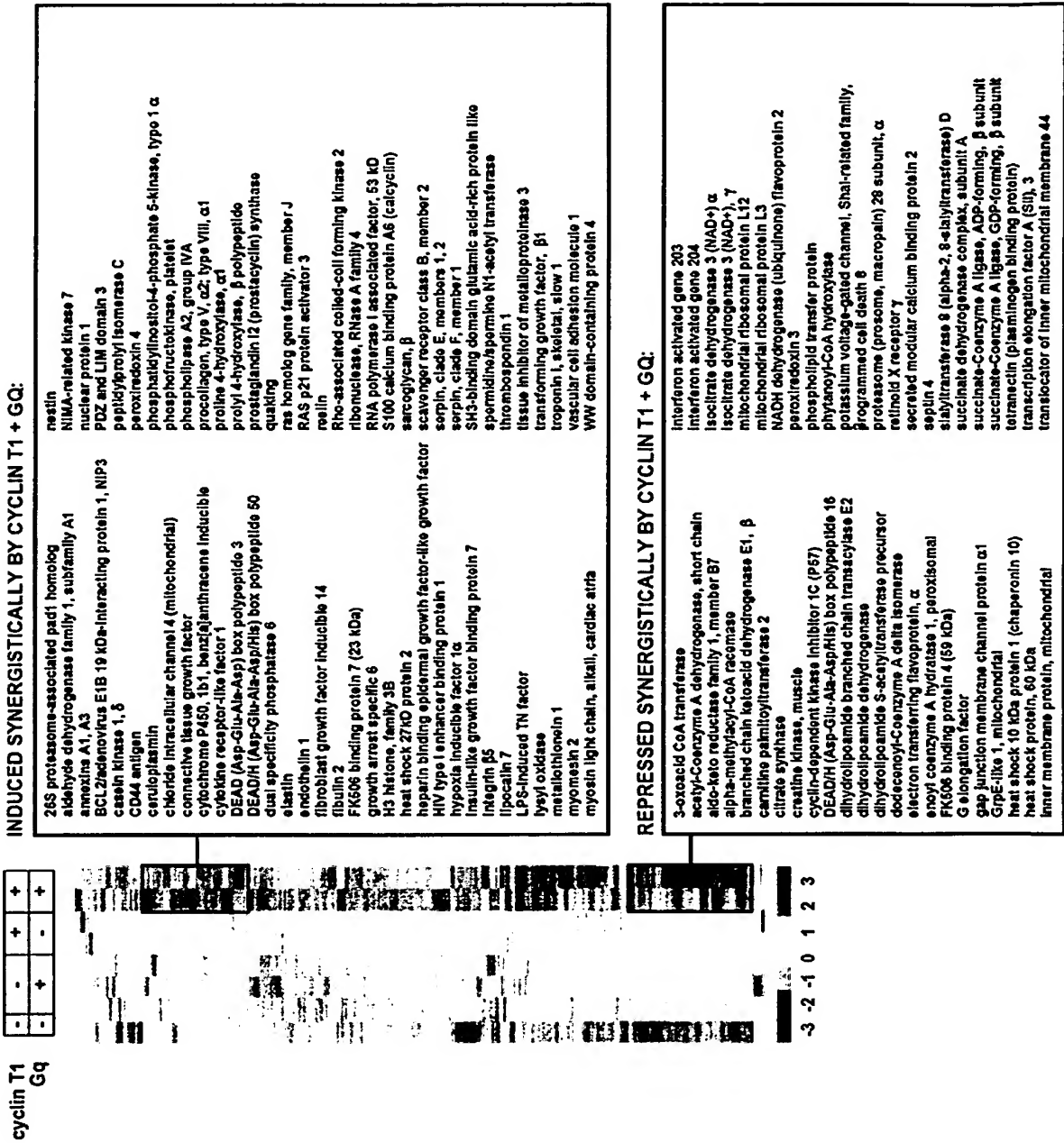


FIG. 7



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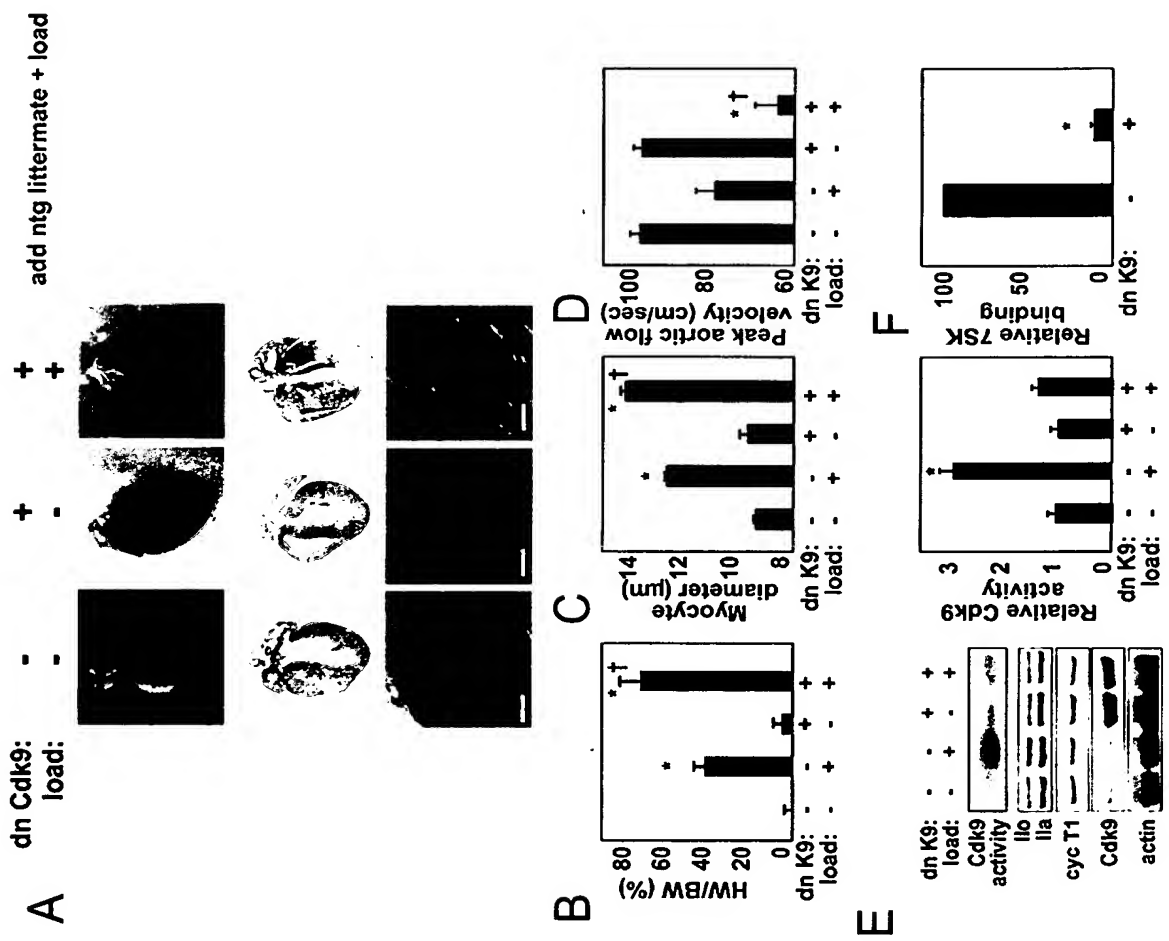


FIG. 8

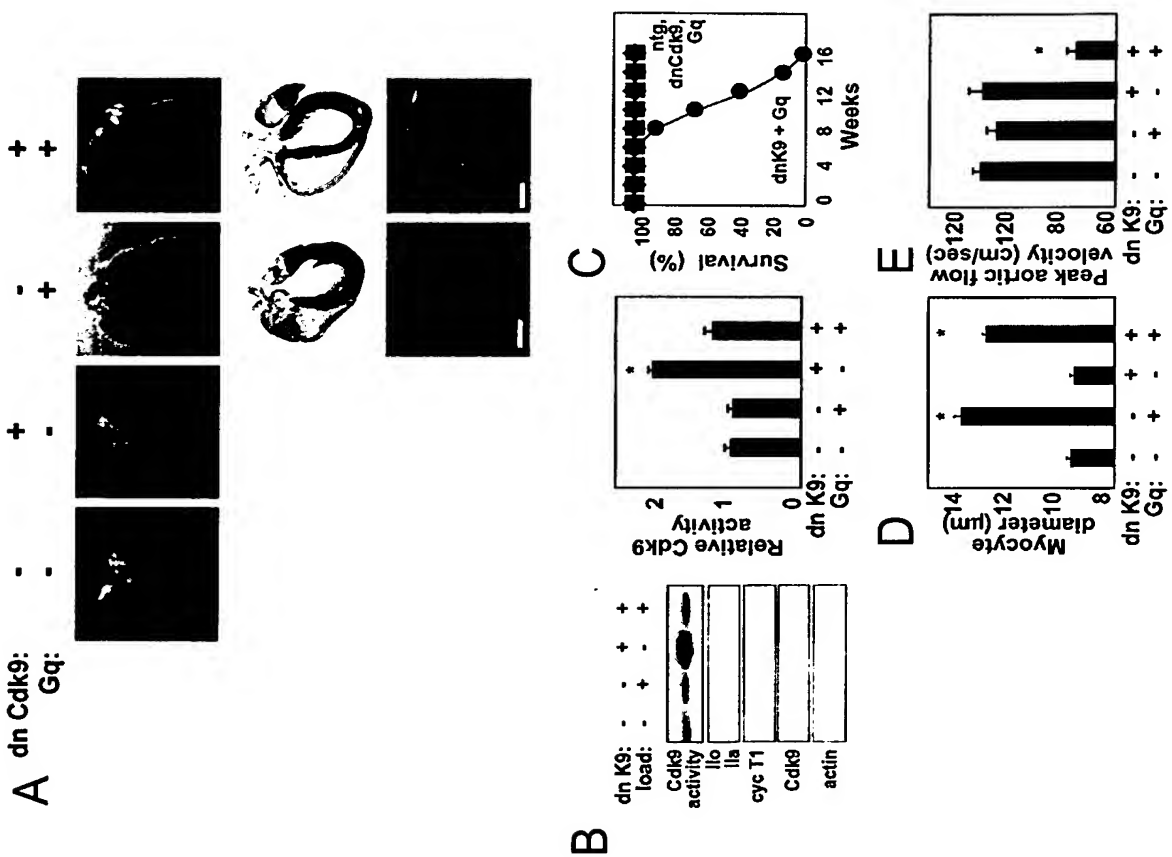
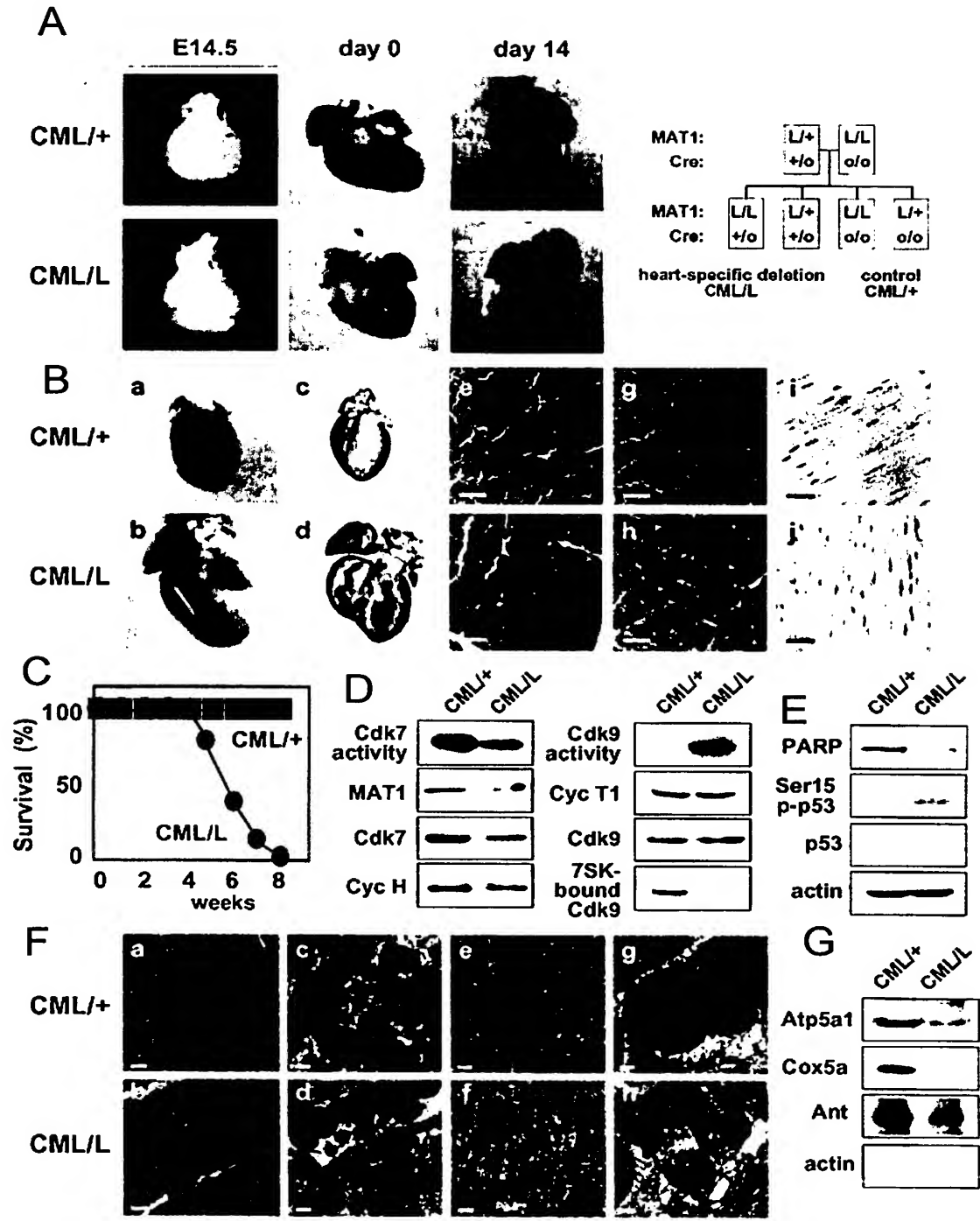
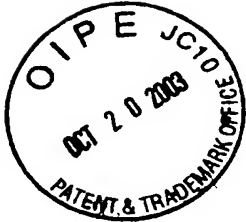


FIG. 9





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REPPRESSED AT 4 WK BY CARDIOMYOCYTE-SPECIFIC DELETION OF MAT1:

3-oxoacid CoA transferase
acyl-Coenzyme A dehydrogenase, short chain
BCL2/adrenovirus E1B 19 kDa-interacting protein 1, NIP3
major morphogenic protein
branched chain ketoadid dehydrogenase E1, beta
cadherin 13
calcium channel, voltage-dependent, T type, alpha 1G
cysteine 150-deficient gene expressed in ventricle 1
calcylol-O-methyltransferase
citrate synthase
cys-Rike 1 (Drosophila)
cytochrome c oxidase, subunit VIIa 1
DEAD (Asp-Glu-Ala-Asp) box polypeptide 16
deleted in polyposis 1
dihydrodipnoimide branched chain transacylase E2
dihydrodipnoimide dehydrogenase
dodecanoyl-Coenzyme A delta isomerase
electron transferring flavoprotein, alpha
enoyl coenzyme A hydratase 1, peroxisomal
enoyl Coenzyme A hydratase, short chain, 1, mitochondrial
fibroblast activation protein
FKBP6 binding protein 4 (56 kDa)
four and a half like domains 2
fumarate hydratase 1
G elongation factor
gap junction membrane channel protein alpha 1
heat shock 70 kDa protein 1 (chaperonin 10)
heat shock protein, 60 kDa
histidine rich calcium binding protein
interferon activated gene 203
inorganic related hexameric (Drosophila)
isocitrate dehydrogenase 3 (NAD⁺) alpha
isocitrate dehydrogenase 3 (NAD⁺), gamma
isovaleryl coenzyme A dehydrogenase
lig ligand

Hpin 1
 lipocalin 7
 metal response element binding transcription factor 2
 methionine 1
 N-acetylthioester-Coenzyme A mutase
 mitochondrial ribosomal protein L12
 mitochondrial ribosomal protein L34
 myeloid leukemia factor 1
 myomesin 2
 NADH dehydrogenase (ubiquinone) flavoprotein 2
 p300/CBP-associated factor
 peroxiredoxin 3
 phosphorocitokinase, liver, B-type
 phospholipid transfer protein
 phytylthio-CoA hydroxylase
 plasma membrane-associated protein, 63-12
 potassium voltage-gated channel, Shal-related family, 2
 programmed cell death 8
 profilin
 prostaglandin D2 synthase (21 kDa, brain)
 proteasome (prosome, macropain) 26 subunit, alpha
 RAN guanine nucleotide release factor
 retinoid X receptor gamma
 RAN guanine nucleotide release factor
 succinate dehydrogenase complex, subunit 1
 serylthioesterase 8 (alpha-2, 8-serylthioesterase) D
 thiolase/Enoyl-Coenzyme A hydratase, beta subunit
 titratin 2 (tumor metastasis type information regulation 2, homology) 3
 succinate dehydrogenase complex, subunit 1
 succinate-Coenzyme A ligase, GDP-forming, beta subunit
 thyroid hormone receptor type 5 (THRA, homology) (Raltus)
 transcription elongation factor A (54), 3
 transforming growth factor, beta induced, 68 kDa
 translocator of inner mitochondrial membrane 4
 ubiquinol-cytochrome c reductase core protein 1
 vascular endothelial growth factor 8

INDUCED AT 4 WK BY CARDIOMYOCYTE-SPECIFIC DELETION OF MAT1:

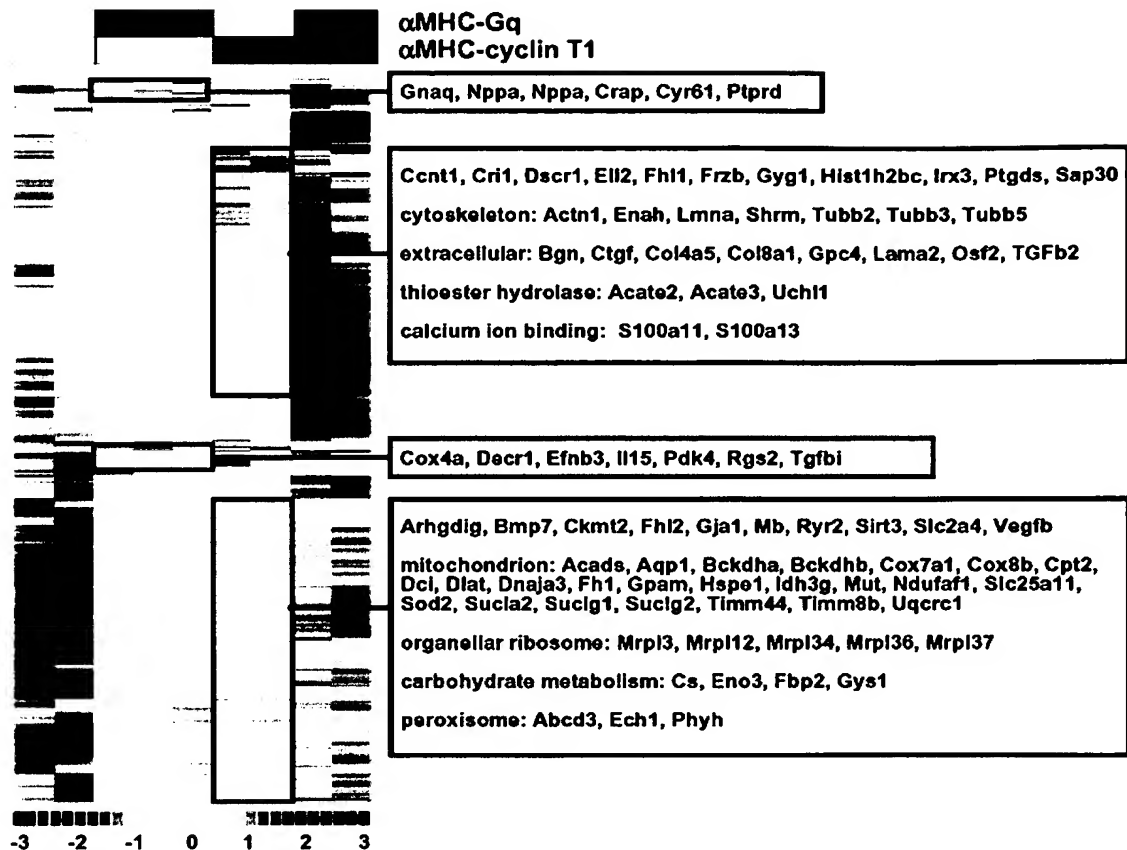
26S proteasome-associated pad1 homolog
5 nucleotide, acts
a disintegrin and metalloproteinase domain 9
actinin, alpha 1
acyl-CoA thioesterase 2, mitochondrial
acyl-Coenzyme A thioesterase 3, mitochondrial
acyldehydrogenase family 1, subfamily A1
annexin A1
annexin A3
aridine homolog 2 (*Drosophila*)
biglycan
calcium and integrin binding 1 (calmyrin)
cardiac myosin
casein kinase 1, delta
CD24 antigen
CD44 antigen
CD81 antigen
chaperonin subunit 9 (theta)
cholesterol intracellular channel 4 (mitochondrial)
chondroitin sulfate proteoglycan 2
coagulation factor 1 (thrombin) receptor
connective tissue growth factor
CRBSP/EP340 inhibitory protein 1
cysteine-dependent kinase inhibitor P1 (P21)
cysteine rich intestinal protein
cysteine rich protein
cytokine receptor-like factor 1
cytokine receptor-like factor 2
DEAD box helicase 60
deiodinase, iodothyronine, type II
diphosphase 1 (NAADH)
dihydropyrimidinase-like 3
elastin
enabled homolog (*Drosophila*)
epidermal growth factor pathway substrate 15
epithelial membrane protein 1
fibulin 2
follistatin-like 1
fourteen and a half LIM domains 1
glutamine synthetase
glutathione peroxidase 3
glycogenin 1
granulin
Gryce-like 1, mitochondrial
H3 histone, family 3B
heat shock 27kD protein 2
heat shock 70 kDa protein 4
heparin-binding epidermal growth factor
histone H3
HIV-1 Rev binding protein
hypoxia inducible factor 1, alpha subunit
insulin
inhibitor of DNA binding 2
insulin-like growth factor binding protein 7
insulin-like growth factor 1 receptor
insulin-like growth factor 2 receptor (alpha)
integrin beta 5 binding protein
integrin beta 5
integrin linked kinase
interferon-related developmental regulator 1
tamin A
low-density lipoprotein receptor-related protein 10
low-density lipoprotein receptor
NN1/sixless

MAP kinase-interacting serine/threonine kinase 2
matrix gamma-carboxyglutamate (gla) protein
moeshin
myosin, heavy polypeptide 7, cardiac muscle, beta
myosinophin
neatin
neurturin
Niemann Pick type C2
N65-associated protein 1-like
nuclear cap binding protein subunit 2, 20kDa
nuclear factor IX
nuclear protein 1X
nucleoside diphosphate-ase enzyme inhibitor
osteoblast specific factor 2 (facilin-like)
paroxsoma 2
PDX and LIM domain 3
phosphatidylcholine, platelet
phosphatidylinositol transfer protein, beta
polyprimidins tract binding protein 2
procollagen C-proteinase enhancer protein
procollagen, type I, alpha 2
procollagen, type IV, alpha 8
procollagen, type V, alpha 2
procollagen, type VIII, alpha 1
progranulin and cell death 8 interacting protein
proinflammatory cytokine polypeptide
prostacyclin 12 (prostacyclin) synthase
protein phosphatase 1A, Mg dependent, alpha
protein tyrosine phosphatase, non-receptor type 21
ptarmine
ras homologous gene family, member J
RAS p21 protein activator 3
resilin
retinol binding protein 1, cellular
RNA binding motif protein 4
RNA polymerase I associated factor, 63 kD
S100 calcium binding protein A10 (calpastatin)
S100 calcium binding protein A11 (calpastinin)
S100 calcium binding protein A13
S100 calcium binding protein A8 (calcyenin)
secreted modular calcium binding protein 2
serpin, class B, member 6
serpin, class E, member 1
serpin, class F, member 1
serine protease inhibitor 6
serine/threonine kinase 2
sialyltransferase 10
sialin associated polypeptide, 50kD
Sod 1
sodium channel homolog 1 (Drosophila)
sphinganine permease N1-acetyl transferase
sphingosine phosphatase lyase 1
talin
thrombospondin 1
tissue factor pathway inhibitor
tubby like protein 4
tubulin, alpha 1
tubulin, beta 2
ubiquitin carboxyl-terminal esterase L6
ubiquitin carboxy-terminal hydrolase L1
uconase dehydrogenase
uridylic acidase
uridylic acidase



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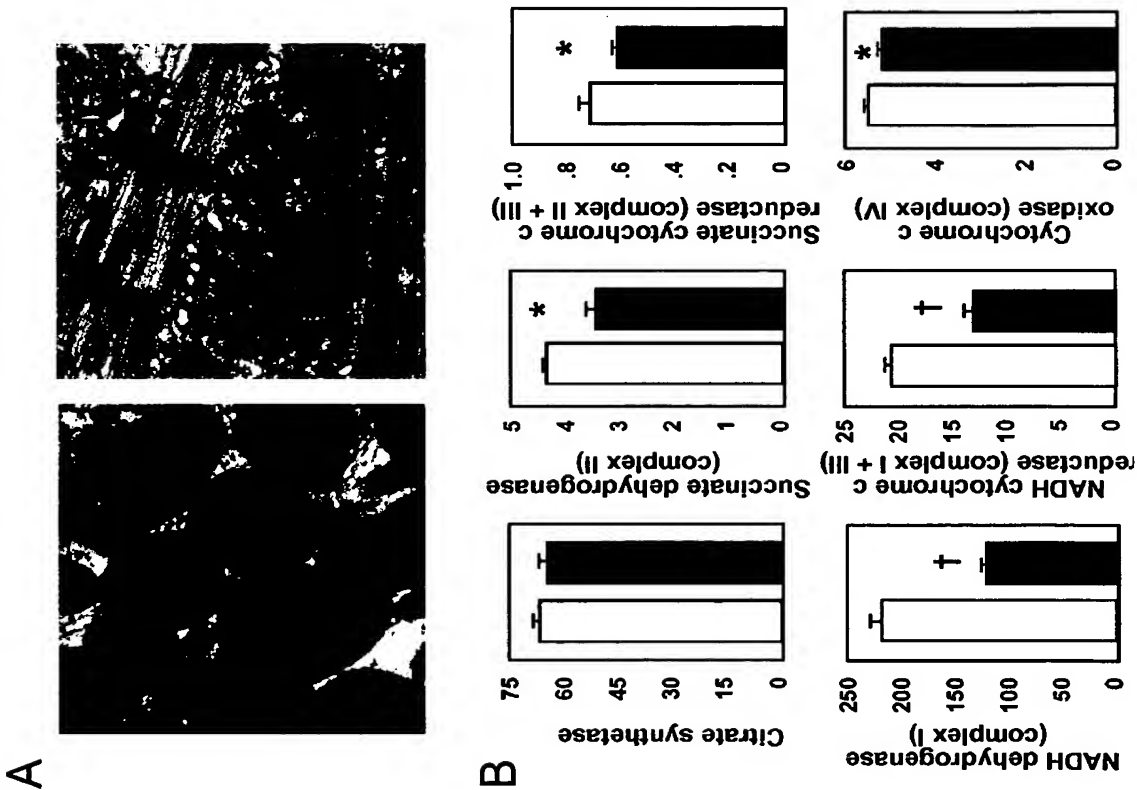
A



B

Genotype	Gq	cyclin T1
Common markers of cardiac hypertrophy		
ANP	34.78	0.29
BNP	3.67	1.43
αMHC	0.84	0.88
βMHC	3.32	1.15
skeletal α-actin	6.49	0.99
SERCA2	0.77	0.77
ryanodine receptor	0.68	0.77
phospholamban	0.96	0.77
connexin-43	1.13	0.77
Hsp70	2.68	12.01
Cardiac-specific transcription factors		
Nkx2.5	0.98	0.84
GATA-4	1.06	0.76
MEF2C	1.02	0.82
Tbx5	0.89	0.98
SRF	1.09	1.03
Mitochondrial function		
PPARγ coactivator-1	0.83	0.39
nuclear receptor factor-1	1.21	0.77
nuclear receptor factor-2	1.12	0.77
Transcription factor A, mitochondrial	0.96	0.77
PPARα	0.99	1.01
carnitine palmitoyltransferase 1	0.97	0.77
cytochrome C	0.86	0.77
cytochrome C oxidase Va (H)	1.03	0.77
cytochrome C oxidase VIa (H)	1.13	0.77
ATP synthase c	1.09	0.77
ATP synthase γ	0.82	0.77
adenosine nucleotide translocator-1	0.94	0.77
Sod2	0.78	0.39

FIG. 12



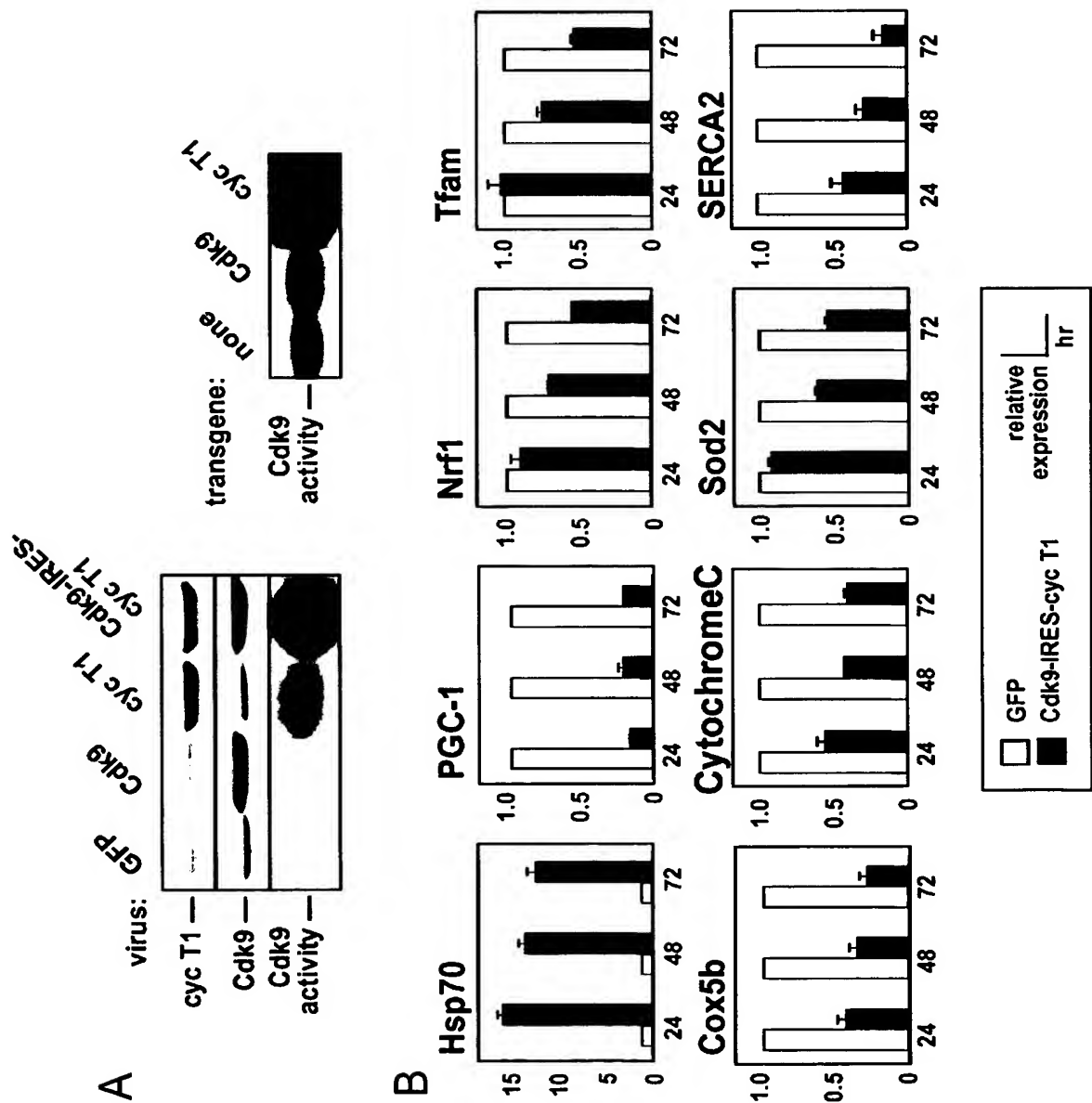
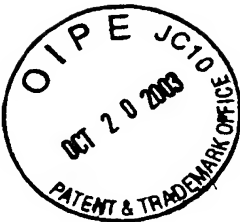


FIG. 14

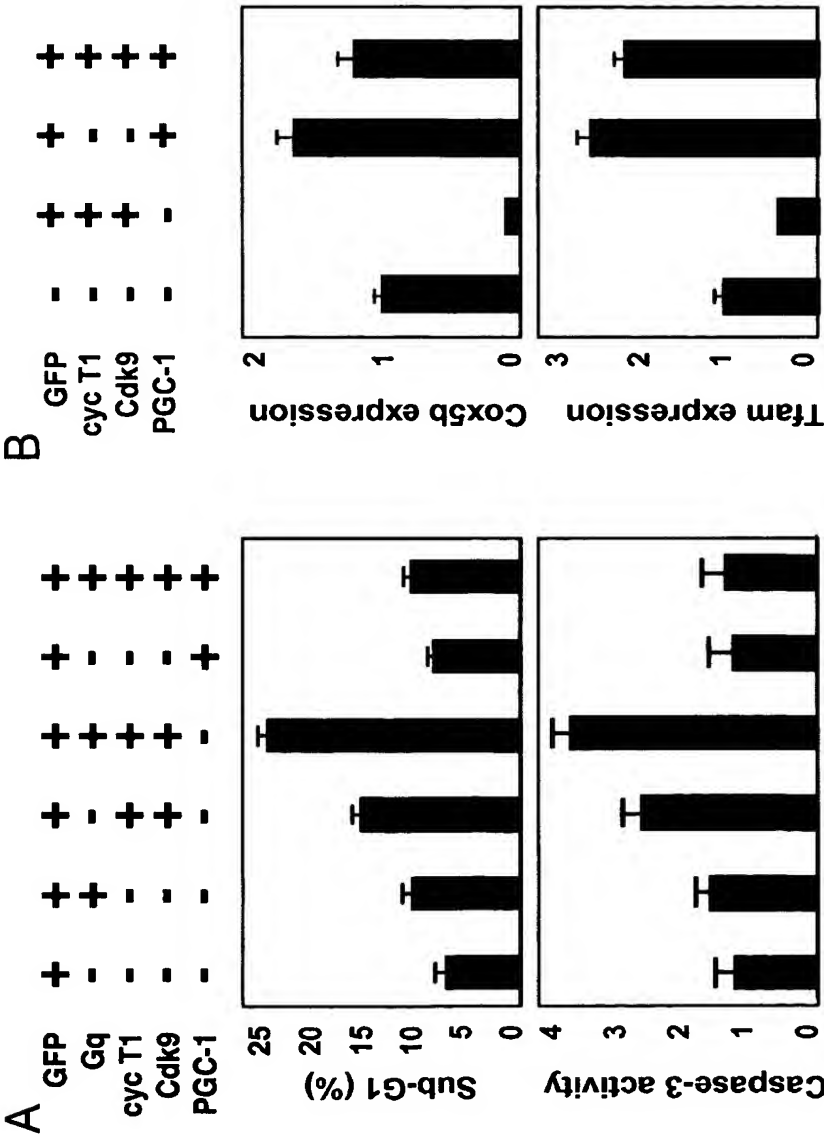
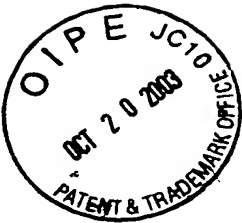


FIG. 15